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SUGAR REPORTS

U. S. DEPARTMENT OF AGRICULTURE - COMMODITY STABILIZATION SERVICE - SUGAR DIVISION

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AGRICULTURE-WASHINGTON

MARKET REVIEW

The quoted wholesale price of refined sugar at New York was reduced to 8.65 cents effective September 13. The price had been 8.80 cents per pound since March 15, and averaged 8.75 cents for the first eight months. The price of raw sugar, duty paid at New York, ranged between 5.98 and 6.27 cents per pound during the first eight and one-half months, and averaged 6.12 cents for January-August. This price which has been declining in recent weeks, averaged 6.03 cents for the first half of September. The spread between the prices of raw and refined sugar, which was at the highest point of the year just prior to the refined sugar price cut and amounted to 2.71 cents per pound during August, declined to 2.65 cents following the price action. Refined sugar prices were also reduced in other marketing areas. Basis prices in such areas now range between 8.30 cents per pound for beet in the Chicago West territory and 8.55 cents for cane in the southeast.

It is too early to determine the effect of the price reduction on sugar deliveries. Deliveries by primary distributors during August were slightly higher than during August 1953 while deliveries by eastern refiners during the week just preceding the price change were unusually low. Total deliveries by all primary distributors by September 11 amounted to 5,717 thousand tons, 206 thousand tons less than for the comparable period of 1953. If consumption of sugar to date has been at the rate of recent years, invisible stocks held by users and secondary distributors have reached near minimum levels. This factor, along with the price reduction should result in distribution for the remainder of the year at least equal to current consumption. Deliveries of beet sugar during August were 8 thousand tons less than in August 1953. This was not the first month this year when beet sugar processors' deliveries were less than last year, but it is the first time their deliveries were down while deliveries by other groups of distributors were higher.

Refiners' stocks, which declined about 111 thousand tons during July, increased 7 thousand in August, and on September 4 were 593 thousand tons, about the same as on August 31, 1953. Charges against quotas for offshore areas during the first eight months totaled 4,634 thousand tons, approximately the same as for January-August 1953. Charges against the quota for Puerto Rico were 160 thousand and for Hawaii 50 thousand tons behind last year, while charges against the quota for the Philippines were more than 200 thousand tons ahead, and those for Cuba slightly higher than last year. As of the close of business on September

24, the balances of the 1954 quotas for the major offshore areas were as follows: Cuba, 213 thousand tons; Hawaii, 328 thousand; Puerto Rico, 315 thousand; and the Philippine Islands, 21 thousand.

It will be recalled that at the end of last year over-quota sugar was permitted to be brought into the United States under bond for refining and holding in inventory to meet early new year requirements. This was done after a finding by the Secretary of the need for such action because of the waterfront situation then existing. In the absence of an emergency situation, a similar finding would not be anticipated this year.

The price of Cuban sugar for the world market averaged 3.28 cents per pound, f.a.s. Havana, for January-August as compared to 3.52 cents for the same period of 1953 and 3.41 cents for last year as a whole. In an attempt to improve world sugar prices, the President of Cuba, on August 28, signed a decree segregating 350 thousand Spanish long tons of that country's world retained quota. This segregated sugar will be sold by the Institute only when the Institute is satisfied that world demand cannot be filled by sugar in the hands of holders of "free sugar." All sugar unsold on January 1, 1955, from this new quota will be incorporated into the 1955 world free quota and an equivalent quantity will be added to the financed reserve quota, and an additional year added to the period for disposing of that reserve.

The International Sugar Council, at its meeting in London on September 8, estimated surplus supplies in the world market at 254 thousand metric tons and recommended voluntary reduction of quotas by exporting countries. The price of Cuban sugar for the world market, which had been around 3.19 cents per pound, f.a.s. Havana, since early September, increased to 3.22 cents on September 22 and on September 24 to 3.25 cents, the lower limit of the Agreement's price range.

MEETING OF THE INTERNATIONAL SUGAR COUNCIL

Representatives of 24 governments attended the meetings of the International Sugar Council in London from September 8 to 10.

At these meetings the Council adopted a revised estimate of free market requirements for sugar for 1954 of 4,330 thousand metric tons, compared with its May estimate of 3,864 thousand tons. The increase of 466 thousand tons in estimated requirements resulted from large unexpected purchases by India, revisions by Japan of its import needs, and a changed statistical basis for reflecting the United Kingdom's supplies and requirements. On the basis of existing quotas of participating countries and probable exports from non-participating countries, the Council then estimated that excess supplies over free market requirements in 1954 were approximately 254 thousand metric tons.

Four exporting countries notified the Council that they would not utilize all of their export quotas. These shortfalls totaled 142 thousand metric tons. In an effort to relieve the market of excess supplies, the Council considered and endorsed a plan which recommended that the exporting countries voluntarily reduce their export quotas in a total amount equal to the excess supply. Under the plan, 100 thousand tons of the shortfalls would first be allocated to the countries having priority under the terms of the Agreement. Other exporters would be asked to waive their right to distribution of the remaining 42 thousand tons. Then the remaining excess of 212 thousand tons would be eliminated by voluntary reductions in export quotas pro rata with each country's basis export tonnage. Countries have until October 1 to accept or reject the plan. Cuba has indicated that it will accept the plan if all other exporting countries agree to it. This will mean a voluntary reduction in Cuba's export quota of 116 thousand tons.

France and Lebanon have ratified the Agreement, but have not yet deposited instruments of ratification. Brazil and Greece anticipate favorable action in the near future. The Council decided to continue these four governments in the same participating status as before, and assessed the 1954 budget on the assumption that they would become full members. It was decided to defer distribution of votes until the next session, scheduled for November 22, in order that membership would be fully in order.

The Council resolved to invite Peru, Indonesia, India, and Pakistan to send observers to the International Sugar Council's meetings. Peru, Indonesia, and India were members of the Sugar Agreement of 1937, but none of the four countries has joined the 1953 International Sugar Agreement.

THE TARIFF ACT AND SUGAR

by

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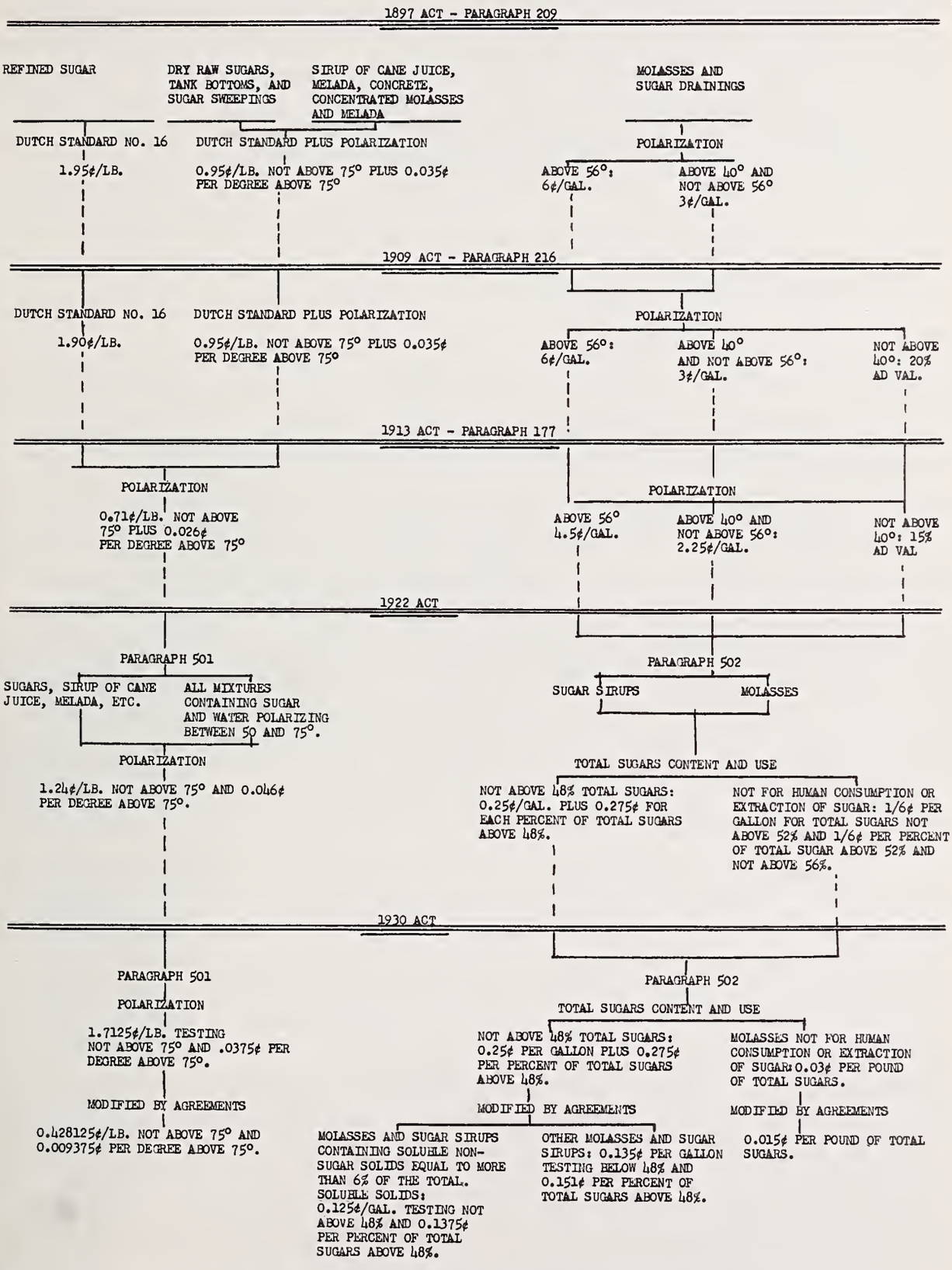
The sugar schedule in the Tariff Acts has undergone a number of changes since 1900 (figure 1). These changes and the circumstances leading up to them give us some insight into the development of the sugar industry and show some of the factors which have influenced our present sugar classification system.

Schedule E - - Sugar, Molasses, and Manufacturers of - - in the Tariff Act of 1897 contained four paragraphs. Paragraph 209 related to sugar and molasses, 210 to maple products, glucose, and sugarcane, 211 to saccharin, and 212 to candy and tinctured, colored, or adulterated refined sugar. In paragraph 209, sugars, sugar, tank bottoms, sirups of cane juice, melada, concrete,concentrated molasses, and sugar sweepings were all treated as sugar, while molasses and sugar drainings were treated as molasses.

Figure 1. TARIFF ACT CLASSIFICATION AND FULL DUTY RATES FOR SUGAR AND MOLASSES SINCE 1897



NOTE: 1. DUTCH STANDARDS CONSIST OF A SERIES OF SAMPLES OF CANE SUGAR VARYING IN COLOR FROM VERY DARK (NO. 8) TO AN ALMOST WHITE (NO. 25), PUT UP IN SEALED BOTTLES BY THE NETHERLANDS TRADING COMPANY.

2. POLARIZATION IS A MEASURE OF SUCROSE CONTENT OF RAW SUGAR AND OTHER SUCROSE CONTAINING MATERIALS.

3. TOTAL SUGARS CONTENT REFERS TO THE SUM OF SUCROSE AND INVERT SUGAR.

The term "sugar" was defined as meaning sucrose, and the sugar of commerce as being sucrose in varying degrees of purity, but the term "sugars" was defined as meaning chemical substances similar to sucrose, but differing from it in composition and properties. Tank bottoms were defined as settlings of sugar and impurities in molasses tanks. Melada is an alternative name for cane sirup and, as in the case of molasses, may be concentrated by boiling down to a thick granulous mass which hardens on cooling (concrete). Molasses is designated as a by-product from which part or all of the sugar content has been crystallized and removed while sirup is a direct product of cane juice, containing all the sugar, but freed from impurities and boiled to the desired consistency. Barbados "molasses" is an exception - although called molasses, it is actually cane sirup. 1/

Two tariff rates were applied to each of the two classes of products. The sugar class rates were separated on the basis of quality, that is, degree of refinement, and the molasses rates were separated on the basis of whether the molasses could or could not be used to produce sugar. At that time molasses was used to produce sugar, and it was apparently the theory that only molasses polarizing 56 sugar degrees and above was so used to produce sugar. The duties for sugars and molasses were assessed according to two different testing methods. Molasses and sugar drainings were tested by the polariscope and 56 sugar degrees by polariscopic test was established as the dividing line between the two rates. Sugar and the other products contained in paragraph 209 were tested by the Dutch color standards. 2/ Sugar lighter in color than No. 16 DS and refined sugar were subject to a higher rate than unrefined sugars darker than No. 16. Those darker than No. 16 DS were subject to a basic rate plus a sliding scale based on polarization above 75 sugar degrees.

An examination of paragraph 209, and the rates imposed by that paragraph, suggests that there were four types of sugar products in use by the trade at that time: (1) dry raw sugar; (2) dry refined sugar; (3) molasses, sirups, and concretes used as raw sugar; and (4) molasses for edible and other purposes, such as for livestock feed and the production of alcohol, although much of the "industrial" molasses polarizing less than 40 degrees would probably enter as waste material.

1/ Summary of Tariff Information, pp. 289-92 (1920), prepared for the Committee on Ways and Means, House of Representatives, under the direction of the Clerk of the Committee.

2/ The Dutch Standard consists of a series of samples of cane sugar, varying in color from very dark (No. 8) to an almost white No. 25, which were put up in sealed bottles annually by the Netherlands Trading Company.

The 1897 Act tariff rate provided for dry raw sugar testing not above 75 degrees was 0.95 cent per pound and in addition, 0.035 cent per pound for each degree above 75 (rate for 96 degree sugar was 1.685 cents per pound), and the same rate was applied to sirups, melada, concrete, and concentrated melada and molasses. Refined sugar or its equivalent was assessed at a rate of 1.95 cents per pound. Molasses testing above 40 degrees and not above 56 degrees was dutiable at 3 cents per gallon and that testing above 56 degrees at 6 cents per gallon. On December 27, 1903, the rates for products of Cuba were reduced by twenty percent of the full duty rate.

The Act of 1909 retained schedule E almost exactly as it was in 1897 insofar as inclusion of articles was concerned. Sugar and molasses were still contained in the same paragraph, but molasses was subdivided into three groups presumably on the basis of its use: (1) molasses polarizing 40 sugar degrees or less was considered a waste product for industrial uses; (2) molasses polarizing between 40 and 56 sugar degrees was looked upon as an edible product; and (3) molasses polarizing more than 56 sugar degrees was regarded as suitable raw material for processing into refined sugar. Thus "blackstrap" molasses emerged as an industrial raw material in the sugar schedule as distinguished from molasses for human consumption.

The 1909 Act did not change the rate for raw sugars, but the refined rate was reduced to 1.90 cents per pound. Three rates were provided for the three types of molasses, but one of the rates was based on value while the other two were based on a flat charge per gallon. The molasses rate for molasses testing less than 40 degrees was 20 percent ad valorem, but for molasses testing between 40 degrees and 56 degrees and for that testing above 56 degrees, the rates were the same as those in the 1897 Act, which were 3 cents and 6 cents per gallon respectively. Cuban products continued to enjoy a 20 percent preferential treatment.

Schedule E of the 1913 Tariff Act, however, was changed very significantly in two respects, both of which were made in the sugar and molasses paragraph (177). The Dutch color standards were eliminated completely from the Tariff Act and in its place was substituted the polariscopic test which remains in the present Act. The second significant change was that one rate for sugar, raw or refined, was established in place of the two rates provided in the earlier Acts, or in other words the sugar tariff rate was applied on the basis of quantity and not on the dual bases of quantity and kind. Molasses was treated in the same way that it was in the 1909 Act, i.e. separated into three groups by polarization, which corresponded roughly to use.

All rates were reduced in the 1913 Act and in addition the sugar paragraph contained a very important proviso: "...Provided further, That on and after the first day of May, nineteen hundred and sixteen, the articles hereinbefore enumerated in this paragraph shall be admitted free of duty." This proviso was repealed, however, by the Act of April 27, 1916, Chapter 93, before it became effective, but the 20 percent preferential treatment for Cuban products was maintained. The lower rates provided for in the 1913 Act were as follows: (1) sugar, including sirups of cane juice, melada, etc., testing not above 75 degrees, 0.71 cent per pound and for every additional degree, 0.026 cent per pound; (2) molasses testing not above 40 degrees, 15 percent ad valorem; (3) molasses testing above 40 degrees and not above 56 degrees, 2.25 cents per gallon; and (4) molasses testing above 56 degrees, 4.5 cents per gallon.

In a report, Summary of Tariff Information 1920 3/ prepared in anticipation of a general revision of the Tariff Act of 1913, some of the problems involved in assessing tariff on molasses on the basis of polarization and a combination of ad valorem and specific rates were pointed out. The report illustrated the point by showing that a Barbados molasses polarizing 39.3 sugar degrees paid a rate of 6 cents per gallon but a similar molasses having the same value but polarizing 41.1 sugar degrees paid only 2-1/4 cents per gallon. The same difficulty pertained to industrial molasses. The undesirability of using the polariscopic test for evaluating molasses and sirups was substantiated by the Bureau of Standards. A representative of the Bureau, testifying before the House Committee on Ways and Means, demonstrated that polarization did not show the total sugars content of molasses and that the total sugars in the molasses represented the value of molasses. 4/ Consequently, the stage was being set for other important changes in the Tariff Act and these changes were enacted in 1922. In the meantime the Emergency Tariff Act of May 27, 1921, provided a rate of 1.16 cents per pound for sugars testing not above 75 degrees and an additional 0.04 cent per pound for every degree above 75. The full duty rate for 96 degree sugar was two cents per pound and the Cuban rate continued to be 20 percent below the full duty rate.

Schedule E became Schedule 5 in the 1922 Act and was expanded to contain five paragraphs. Several significant changes were made in the articles contained in the various paragraphs: (1) sugar and molasses were separated and became paragraphs 501 and 502 respectively; (2) rare sugars were named in a new paragraph; and (3) saccharin was moved to the chemicals schedule.

3/ Summary of Tariff Information, p 293 (1920), prepared for use by the Committee on Ways and Means, House of Representatives, under the direction of the Clerk of the Committee.

4/ Hearings on General Tariff Revision before the Committee on Ways and Means, House of Representatives, Vol. 2, pp. 1345-48 (1921).

The changes, however, were not limited to a reshuffling of articles and paragraphs. New items were added and new testing methods for molasses were introduced. Changes in the sugars paragraph (now 501) included the removal of molasses (although concentrated molasses was retained) from this paragraph as well as "sugar drainings" and "sugar sweepings." A new type of article was inserted - "all mixtures containing sugar and water." The Tariff Commission in its Summary of Tariff Information 1921 5/ suggests that "all mixtures containing sugar and water" was inserted to replace "sugar drainings" and "sugar sweepings" and to be more inclusive. Subsequent developments did show the term to be more inclusive.

Molasses became the principal item of a new paragraph (502). Originally, 502 contained the terms "molasses and sirups" but when finally enacted, the terms became "molasses and sugar sirups." The source of the term "sugar" was not shown by the Tariff Commission reports nor was the term "sugar sirup" defined. 6/ However, its inclusion in paragraph 502 along with the wording of paragraph 501 led to developments which were apparently not foreseen at that time.

The changes in Schedule 5 introduced into the Tariff Act of 1922 were in general constructive but also introduced some confusion. Paragraph 501 was redundant in certain respects. Sirups of cane juice, melada, and some mixtures containing sugar and water are in general identical products. The redundancy was compounded to a certain extent by paragraph 502 in that Barbados molasses which was classified in paragraph 502 is not molasses but a sirup of cane juice. There was considerable overlapping of categories in these two paragraphs.

The shift from a polarization to a total sugars basis was a significant change in the molasses paragraph. Furthermore, the new molasses paragraph introduced intended use as a criterion for tariff rate assessment. However, limits were placed on the total sugars content of molasses intended for industrial uses insofar as favorable tariff rates were concerned. Blackstrap molasses generally polarizes less than 40 sugar degrees as established in the 1913 Act, and practically all imported blackstrap contains more than the 48 percent total sugars provided in

5/ Summary of Tariff Information, p. 596 (1921), prepared by the Tariff Commission for the Committee on Finance, House of Representatives, relative to H.R. 7456.

6/ At that time, the term "sugar sirups" was probably used to refer to edible sirups such as filtered refiners' sirup and other table sirups. It was defined by a Customs Court of Appeals in 1927 as being a "saturated solution of sugar in water, Treasury Decisions Vol. 51, T.D. 42185 (1927), Cresca Co.(Inc.) v. United States (No. 2817).

the 1922 Act. Similarly molasses which polarizes 56 sugar degrees (1913) contains appreciably more than 56 percent total sugars as provided in the 1922 Act. Consequently, the 1922 Act made a constructive change in testing methods but a restrictive change in establishing the limits for the different types of molasses.

The sugar rate was increased slightly by the 1922 Act to 1.24 cents per pound for sugars testing less than 75 degrees and for mixtures containing sugar and water testing between 50 and 75 degrees and an additional 0.046 cent per pound for every degree above 75. Although molasses and sugar sirup, not specially provided for, were subdivided according to total sugars content, the rates were based on a combination of cents per gallon and cents per percent of total sugars: (1) molasses testing not above 48 percent total sugars, 0.25 cent per gallon and 0.275 cent for each percent of total sugars above 48; (2) molasses testing not above 52 degrees and not for human consumption or extraction of sugar, one-sixth of one cent per gallon and one-sixth of one cent for each percent of total sugars above 52 and not above 56.

These restrictions, however, were mostly removed by the Act of 1930 which is in force as modified by agreements at the present time. The only change of significance in the sugar schedule was made in paragraph 502 for molasses in that molasses was separated into two groups on the basis of intended use regardless of sugar content with the lower rate provided for industrial molasses. The rate for other molasses and sugar sirups was based on a minimum rate for 48 percent or less total sugars with an increment for each additional percent of total sugars above 48 and the rate for industrial molasses was based on pounds of total sugars.

The rates provided in the Act of 1930 were as follows: (1) sugars testing not above 75 degrees, 1.7125 cents per pound and in addition 0.0375 cent per pound for every degree above 75; (2) molasses and sugar sirups, n.s.p.f., testing not above 48 percent total sugars, 0.25 cent per gallon and in addition 0.275 cent for every percent of total sugars above 48; and (3) molasses not for human consumption or the extraction of sugar, 0.03 cent per pound of total sugars. These rates have been modified by various agreements 7/ until now the rates are as follows: (1) sugars testing not above 75 degrees, 0.428125 cent

7/ Presidential proclamation under Section 336, Tariff Act of 1930, effective June 8, 1934; Trade Agreement, Peru, effective July 29, 1942; Geneva Agreement, effective January 1, 1948; GATT (Annecy), May, 1950; and GATT (Torquay), effective June, 1951.

per pound and in addition 0.009375 cent per pound for every degree above 75; (2) molasses and sugar sirups testing not above 48 percent total sugar containing non-sugar solids equal to more than 6 percent of the total solids, 0.125 cent per gallon and in addition 0.1375 cent for each percent of total sugars above 48; (3) other molasses and sugar sirups, 0.135 cent per gallon and in addition 0.151 cent for each percent of total sugars above 48; and (4) molasses not for human consumption or the extraction of sugar, 0.015 cent per pound of total sugars. Cuban products have continued to receive preferential treatment. Another important change brought about by the various agreements 7/ was the introduction of a division of edible molasses and sugar sirups into two groups based on non-sugars content in accordance with provisions of the Jones-Costigan Act and the Sugar Acts.

The changes which have been made in the Tariff Acts since 1897 have gradually resulted in the emergence of three types of sugar products: (1) sugar or products from which sugar can be extracted, (2) sugar products not used to produce sugar, and (3) sugar products not used to produce sugar or for human consumption. This would appear to be a satisfactory overall classification of sugar and sugar products. However, these categories have been reduced in effectiveness by developments which were taking place before and since the 1930 Act was enacted. These developments have resulted from the interplay of technology, tariff rates, the Sugar Act, and wartime controls. They fall into two categories-liquid sugar and manufactured articles in chief value or consisting in major proportion of sugar.

THE TARIFF ACT AND LIQUID SUGAR

None of the Tariff Acts contain the term "liquid sugar," but the Acts of 1922 and 1930 contain articles which are included in the Sugar Act definition of liquid sugar. Unfortunately these articles are contained in two different paragraphs under two tariff rates, and the manner of development of liquid sugar as an import may have resulted from that inconsistency. However, it must be remembered that at the time these Acts were passed, "sugar" was considered to be "dry sucrose"; sugars were raw materials used to produce dry "sucrose"; and molasses and sirups were finished products for human consumption or industrial purposes and not used as "sugar" or to produce "sugar." It must

7/ Presidential proclamation under Section 336, Tariff Act of 1930, effective June 8, 1934; Trade Agreement, Peru, effective July 29, 1942; Geneva Agreement, effective January 1, 1948; GATT (Annecy), May, 1950; and GATT (Torquay), effective June, 1951.

also be remembered that dry "sucrose" was and still is, overwhelmingly the major "sugar of commerce". Furthermore, household consumption then was the major outlet for sugar.

More recent developments, reflected in the Sugar Act of 1937 in which both invert and sucrose types of liquid sugar are defined as sugars, would suggest that the Tariff classification has become obsolete. Industrial consumers of sugar have become a major factor in the sugar consumption picture, and many of these are using substantial quantities of inverted sugar as well as sucrose.8/ This inverted sugar, however, is derived from sucrose and it is used not only for sweetness as sucrose is but also for other of its characteristics.

The Tariff Acts of 1922 and 1930 have been at least partly responsible for the development of importations of liquid sugar as well as the type of liquid sugar imported. It was initiated by the Tariff Act of 1922 when "molasses" became a new paragraph and the words "and sugar sirup" were added to molasses in paragraph 502 with tariff rates substantially below those in the sugar paragraph (501). Liquid sugar embraces sugar sirups some of which would be dutiable under paragraph 501 as mixtures containing sugar and water, polarizing more than 50 sugar degrees and some of which would be dutiable under paragraph 502 by virtue of the fact that total or partial inversion makes them polarize less than 50 sugar degrees.

The difference in full duty rates for liquid sugar can be illustrated in this way - - a mixture of sugar and water polarizing 75 degrees (containing 75 percent sugar), 1.24 cents per pound of sugar under paragraph 501; and for a sugar sirup polarizing less than 50 degrees but containing 75 percent total sugars, 0.754 cent per pound of sugar under paragraph 502. The difference is greater when the comparison is made between one pound of crystalline sugar polarizing 100 degrees and a pound of sugar in invert liquid sugar (1.912 and 0.75 cents per pound respectively.) The circumstances surrounding the inclusion of the term "sugar sirup" in 502 are not immediately apparent. The Summary of Tariff Information published in 1920, 1921, and 1929 contain no references to the term "sugar sirup". Sirup is mentioned but in the context of a concentrated cane juice or molasses.

In 1927, a Customs Court of Appeals determined that a sugar sirup was a saturated solution of sugar in water, 9/ and it was not long after that decision was made that inverted "sugar sirups" began to show up in our imports. There may be some doubt as to the accuracy of the data in table 1, but they do show the

8/ See Marketing Liquid Sugar, Marketing Research Report No. 52, U. S. Department of Agriculture, FMA., Washington, D.C., June 1953.
9/ Treasury Decisions Vol. 51, T.D. 42185, 722-25 (1927).

relative rate of growth of this import up to the time sirup quotas were established under the Jones-Costigan Act and later as quotas under the Sugar Act.

Table 1

Imports of Sugar Sirups Excluding Edible Molasses

Year	Gallons Imported	Year	Gallons Imported
1929	128,607	1933	6,591,427
1930	4,225,807	1934	7,910,389
1931	3,843,880	1935	9,519,381
1932	6,964,585		

Although there may have been some "sugar sirups" imported prior to 1929, the quantities were probably so small that no particular significance was attached to them. Consequently, the term "sugar sirup" did not occur in the Summary of Tariff Information published in 1929 other than where it was used as a part of paragraph 502. The events that occurred after 1929 and after the enactment of the Act of 1930, however, changed the picture appreciably,and in Report to the President on Sugar (No. 73, second series,1934), the significance of this new "sugar sirup" was pointed out clearly. The picture was obscured slightly by reference to the product as "inverted cane sirup" which did not precisely describe the product referred to in the Sugar Act as liquid sugar.

Another development in 1930 showed how important this product could be but tariff rates were then at issue rather than what was or was not sugar. In 1930 several refiners brought raw sugar to the three mile limit, dissolved it in sufficient water to test less than 50 sugar degrees by the polariscope and entered the product under paragraph 502 (See Business Week, page 15, February 18, 1931). The Collector of Customs declared that it was dutiable under paragraph 501 or under paragraph 1559 as a manufactured article of mixed materials consisting in chief value of sugar. A test case was brought before Customs Court where it was determined that the product did not fall directly within paragraph 501 but by application of paragraph 1559 and because sugar was the component of chief value was dutiable under paragraph 501. 10/

The Customs Court decision with respect to the mixture of raw sugar and water emphasized the overlapping of categories in

10/ Treasury Decisions Vol. 61, T.D. 44477 (1932), Savannah Sugar Refining Corporation v. United States

paragraphs 501 and 502 and tended to obscure the place of "sugar sirup" in the sugar picture. A sugar sirup composed of sucrose and water is dutiable under 501, but one composed of invert sugar is dutiable under 502. The confusion was carried forward into the Jones-Costigan Act in which "sugar sirups" were considered a specialty product to be handled separately from sugar if desired. Although the Sugar Act of 1937½ corrected this by defining liquid sugar, its separate identity was retained insofar as foreign quotas were concerned as a separate and special type of sugar. Even though liquid sugar was recognized as sugar in the Sugar Act, similar recognition was not given in the Tariff Act. As a matter of fact, a court decision involving the Tariff Act in 1949 stated that paragraph 501 generally included dry sucrose or products which were to be used to produce dry sucrose. 11/ The decision suggested that 501 referred to products to be refined into sugar and 502 referred to finished products. That decision is somewhat at variance with present trade practices or with the concepts set forth in the Sugar Act.

Although tariff rates for sugar sirup under 502 have been adjusted by various agreements so as to be nearer to those provided for in 501, they are still not equal. Because tariff rates in paragraphs 501 and 502 have different bases, the rates under these two paragraphs cannot be made completely equal. Because the Tariff Acts have classified invert liquid sugar as a sugar sirup with a lower tariff rate under paragraph 502, this article has developed as "sugar" but is not so recognized by the Tariff Act.

MANUFACTURED PRODUCTS CONTAINING SUGAR AND THE TARIFF ACT

It is difficult to develop the effects of the Tariff Act on the relationship of manufactured products containing sugar to sugar under the Sugar Act. The present Tariff Act specifically provides for many of the solid products such as sweetened chocolate, candy, and confections, and consequently it is doubtful that any such solid products would ordinarily fall within the paragraphs which pertain to Sugar Act sugar. However, there is a possibility that Tariff Act classification may provide a separate status for some articles which are essentially sugar but which appear to be a manufactured article (table 2). Since Tariff Act classifications were developed prior to the present sugar legislation and for somewhat different purposes, it is not surprising that some

11/ U.S. Court of Customs and Patent Appeals Reports, Vol. 37, C.A.D. 417 (1949).

Table 2.- COMPARISON OF FULL DUTY TARIFF RATES FOR SUGAR AND SUGAR CONTAINING PRODUCTS UNDER VARIOUS TARIFF ACT PARAGRAPHS

TARIFF ACT OF:	SUGAR, 100° OR REFINED	SUGAR SIRUP (NON SUGAR SOLIDS LESS THAN 6% OF TOTAL SOLUBLE SOLIDS)	CANDY AND CONFECTIONERY, N.S.P.F., REFINED SUGAR WHEN COLORED, TINCTURED, OR IN ANY WAY ADULTERATED	FLAVOR EXTRACTS NON-ALCOHOLIC	ARTICLES MANUFACTURED IN WHOLE OR IN PART, N.S.P.F.	EACH IMPORTED ARTICLE NOT ENUMERATED IN THIS ACT, WHICH IS SIMILAR EITHER IN MATERIAL, QUALITY, TEXTURE, OR THE USE TO WHICH IT MAY BE APPLIED, TO ANY ARTICLE ENUMERATED IN THIS ACT....
1897	PARAGRAPH 209: 1.95¢/LB.	1/	PARAGRAPH 212: (a) VALUED AT 15¢ PER POUND OR LESS-4¢/LB. PLUS 15% AD VAL. (b) VALUED AT MORE THAN 15¢ PER POUND-50% AD VAL.	1/	SECTION 6: 20% AD VAL.	SECTION 7: AT A RATE AS IF WHOLLY COMPOSED OF THE COMPONENT OF CHIEF VALUE.
1909	PARAGRAPH 216: 1.90¢/LB.	1/	PARAGRAPH 219: NO CHANGE.	1/	PARAGRAPH 385: NO CHANGE.	PARAGRAPH 386: NO CHANGE.
1913	PARAGRAPH 177: 1.360¢/LB.	1/	PARAGRAPH 180: (a) VALUED AT 15¢ PER POUND OR LESS-2¢/LB. (b) VALUED AT MORE THAN 15¢ PER POUND-25% AD VAL.	PARAGRAPH 46: 20% AD VAL.	PARAGRAPH 385: 15% AD VAL.	PARAGRAPH 386: NO CHANGE.
1922	PARAGRAPH 501: 2.390¢/LB.	PARAGRAPH 502: 0.75¢/LB. OF SUGAR CONTENT. 2/	PARAGRAPH 505: 40% AD VAL.	PARAGRAPH 40: 25% AD VAL.	PARAGRAPH 1459: 20% AD VAL.	PARAGRAPH 1460: NO CHANGE.
1930	PARAGRAPH 501: 2.65¢/LB.	PARAGRAPH 502: 0.89¢/LB. OF SUGAR CONTENT. 2/	PARAGRAPH 506: NO CHANGE.	PARAGRAPH 39: NO CHANGE.	PARAGRAPH 1558: NO CHANGE.	PARAGRAPH 1559: NO CHANGE.
1930 ACT AS MODIFIED BY AGREEMENTS	PARAGRAPH 501: 0.6625¢/LB.	PARAGRAPH 502: 0.49¢/LB. OF SUGAR CONTENT.2/	PARAGRAPH 506: (a) VALUED UNDER 6¢ PER POUND-20% AD VAL. (b) VALUED AT 6¢/LB. OR MORE-44% AD VAL. (c) SUGAR REFINED-40% AD VAL.	PARAGRAPH 39: 7.5% AD VAL.	PARAGRAPH 1558: NO CHANGE.	PARAGRAPH 1559: NO CHANGE.

1/ THIS TYPE OF ARTICLE WAS NOT SPECIALLY PROVIDED FOR IN THE ACT. 2/ APPROXIMATE - CALCULATED AT 75% TOTAL SUGARS; VARIES WITH SUGAR CONTENT.

applications of the Tariff Act are not entirely in keeping with objectives of the Sugar Act.

It is interesting to note that the paragraph on candy includes "sugar after being refined, when tinctured, colored, or in any way adulterated". Similar articles were included in the Act of 1897, 1909, 1922 but were not in the 1913 Act. The reasons for their elimination and reappearance were not given in the Summary of Tariff Information for 1920, but this report suggested that pulverized sugar mixed with starch or colored granulated sugar for confectioners use would fall into this paragraph. For that reason, the Commission suggested a tariff rate which would be at least as high as that in paragraph 501. From the standpoint of Sugar Act objectives, such products are the same as sugar.

Although the paragraph on candy apparently provides for all the types of solid products which are closely related to sugar, there is a possibility that some articles might fall within a paragraph unrelated to sugar. One such possibility is provided for by a paragraph in schedule 1 of the Act. The Acts of 1897 and 1909 contained articles referred to as fruit ethers, oils, and essences in paragraph 21 of Schedule A. In 1913, the same articles appeared in paragraph 46, but a new type of substance, a non-alcoholic "flavor extract" was introduced into paragraph 49. Although "flavoring extracts" were considered to be alcoholic extracts of flavorings and ordorous principles of plants extracted from fruit, seeds, leaves, and roots or an alcoholic solution of essential oils, new "extracts" are being used, which are not alcoholic extracts. Technically, they should be referred to as flavors or imitation flavors since they are not alcoholic extracts and many are synthetic and not natural flavors. The "flavoring extracts" (non-alcoholic) were put into a separate paragraph (40) in schedule 1 of the 1922 Act and in paragraph 39 of the 1930 Act.

Flavor extracts are apparently completely unrelated to sugar in any way, but it is entirely possible for flavored sirups or flavored sugars consisting in chief value of the flavoring ingredient to fall within the provisions of paragraph 39. The Summary of Tariff Information for 1921 stated that these flavors were commonly used for ice cream, beverages, confectionery, and sirups. Some of the problems involved in their use in these products include addition of the flavor in the proper amount and the proper dispersion of the flavor throughout the product. Since these flavors have high flavoring power they are commonly diluted with one of the other ingredients to give better quantity control and dispersion. It so happens that sugar is an ingredient common to these products and could serve as a satisfactory flavor diluent in either solid or liquid form. Some of the "mix it at home" beverage preparations are this type of a product. The idea

is not new, for it has been common practice for years in many homes to have a jar of "vanilla sugar" on hand. Consequently, it can be seen how a "flavoring extract" could be essentially sugar or liquid sugar with a quantity of flavor added. Although these articles may be properly classified for the Tariff Act in some paragraph other than 501 or 502, such classification should not necessarily exclude the articles from Sugar Act control.

The problem is slightly different in the case of flavored sirups which in general fall within the Sugar Act definition for liquid sugar. The decisions of the courts present certain technical complications with regard to these products because the courts have to make decisions on the basis of the circumstances surrounding each case. The article which most commonly appears in court is "grenadine sirup". Importers have tried to enter the product as a fruit beverage, as a non-enumerated article, and more recently as sugar sirup, but Customs has argued at various times that it should enter as (1) fruit sirup; (2) non-enumerated manufactured articles composed of a mixture of two or more ingredients, dutiable under paragraph 501; or (3) as a mixture of sugar and water (501). The courts have determined that it generally comes under paragraph 1558, a non-enumerated manufactured article, 12/ but have also determined on some occasions that it comes within paragraph 501 or dutiable under 501 by virtue of the mixed materials clause of paragraph 1559 13/. In these decisions, the courts have decided that the flavoring generally excludes it from sugar sirup classification (502) 14/. The situation, however, has been different in the case of some flavored sirups of the type which were important during World War II. These sirups were imported as sugar sirup under 502, but Customs declared them to be in either paragraph 1558, or to be a non-enumerated article dutiable under 501 by virtue of paragraph 1559. However, the courts decided in some cases that it properly fell in paragraph 502 and that the flavoring ingredient was so small in amount as to be ignored 15/. In others, similar products were determined to be in paragraph 501 but not by virtue of 1559 16/. According to the Sugar Act, these products might all be classed as liquid sugar.

12/ See Treasury Decisions Vol. 63, T.D. 46491 (1930); Vol.29, T.D. 35923 (1915); Vol. 54, T.D. 43014 T.D. 43024 (1928); and Vol. 51, T.D. 42185 (1927); Vol. 58, T.D. 44233 (1930).
13/ Treasury Decisions Vol. 51, T.D. 42185 (1927)
14/ Treasury Decisions Vol. 60, T.D. 45114 (1931).
15/ See Court of Customs and Patents Appeals Reports Vol. 37 C.A. D. 417 (1949)
16/ Treasury Decisions Vol. 89, C.D. 1633, July 22, 1954.

These cases present some of the problems arising from the fact that Tariff and Sugar Act language is not the same with regard to sugar. They also suggest that the Tariff Act may, in some cases, obscure situations which may properly come within the authority of the Sugar Act, and in any event, these differences result in administrative problems for both Treasury and Agriculture. A review of the changes in tariff rates 17/ for these various articles shows that in general the tariff rates for sugars have been as low as or lower than those for other articles which contain substantial quantities of sugar. The Act of 1897 contained no article which corresponds to non-alcoholic flavoring extracts and flavors other than those in paragraph 21, fruit ethers, essences and essential oils. These were assessed at a rate of $2.00 per pound. Although the 1909 Act reduced this sum to $1.00 per pound, or to not less than 25 percent ad valorem, the rate was still formidable. When "flavor extracts, non-alcoholic" were introduced into paragraph 49 of the 1913 Act, the tariff rate was reduced to 20 percent ad valorem. In the Act of 1922, flavor extracts were placed in a separate paragraph (40) with a rate of 25 percent ad valorem, and in the 1930 Act, as modified by various agreements, the rate for flavor extracts in paragraph 39 was changed to 7.5 percent ad valorem.

Since some of the manufactured articles containing sugar are not specially provided for, they may be classified under paragraph 1558 of the 1930 Act. This paragraph corresponds to section 6 of the 1897 Act, paragraph 385 in the 1909 and 1913 Acts, and paragraph 1459 of the 1922 Act. In each of the Acts, the duty for such articles has been 20 percent ad valorem.

Some sugar containing products may be determined to be a mixture of two or more materials, not enumerated, which is similar either in material, quality, texture, or the use to which they may be applied, to any article enumerated in the Act. If so determined the articles would be dutiable under a specific paragraph by application of this mixed materials clause. Such provision was made in section 7 of the 1897 Act, paragraph 386 in the 1909 and 1913 Acts, paragraph 1460 of the 1922 Act, and in paragraph 1559 of the present Act. These paragraphs provide that the rate to be applied may be on the component of chief value as though the article were entirely composed of that component, or the rate may be on the basis of the highest determinable rate.

The rates for sugar in the various sugars paragraphs have been given previously. A summary of these on the basis of 100° or refined sugar is as follows: (1) 1897 Act (paragraph 209) -- 1.95 cents per pound; (2) 1909 Act (paragraph 216)-- 1.90 cents

17/ The rates presented here are full-duty rates.

per pound; (3) 1913 Act (paragraph 177) -- 1.360 cents per pound; (4) 1922 Act (paragraph 501) -- 2.390 cents per pound; and (5) 1930 Act, as modified, (paragraph 501)-- 0.6625 cent per pound. The earlier Acts had no special provision for invert liquid sugar as we know it. However, the rate per pound of sugar in a 75° Brix sugar sirup under paragraph 502 in the 1922 Act was approximately 0.75 cent per pound, and presently under the 1930 Act, is approximately 0.445 cent per pound of sugar.

The candy and confectionery paragraph in the sugar schedule, which includes refined sugar when colored, tinctured, or in any way adulterated, has generally carried a relatively high tariff compared with sugar. In the 1897 Act, these articles valued at less than 15 cents per pound had a rate of 4 cents per pound plus 15 percent ad valorem, and those above 15 cents in value had a rate of 50 percent ad valorem. These rates were retained in the 1909 Act. They were reduced to 2 cents per pound and 25 percent ad valorem, respectively, under the 1913 Act, but in the 1922 Act they were raised to 40 percent ad valorem. Presently, the rates are 20 percent ad valorem for candy valued under 6 cents per pound, 14 percent for candy above that, and 40 percent ad valorem for refined sugar when colored, tinctured, or adulterated. It is doubtful that there are any other paragraphs in the Tariff Act under which sugar or sugar containing products (other than chocolate products and beverages) would be classified, and in view of the recent change in the Tariff Act (September 1, 1954), it is doubtful that paragraph 1559 can be applied to sugar mixtures of various kinds.

There have been only two articles which were potentially a source of trouble in quota control, and both articles were imported at a time when Sugar Act controls were suspended. Hard candy and flavored sirups of the types imported from foreign countries during the war could be a problem in Sugar Act control. It is probable that changes in the Tariff Act could eliminate some of the problems, but it is doubtful that such changes would necessarily provide satisfactory control under all conditions.

EXPANDING OUTLETS FOR MOLASSES AND SUGAR

Sugar in the form of molasses has been used for livestock feed probably since the beginning of the sugar industry, but it is only in recent years that this use has developed into the major outlet for molasses. Molasses in liquid form is in some instances difficult and inconvenient to use, particularly if only relatively small quantities are required by the farmer or livestock feeder. In order to overcome this handicap, some

molasses is being converted to a solid state, either by absorption on a solid carrier or by actually reducing it to a solid by the removal of water. Today, both liquid and dried molasses are available for livestock feed.

More recently, both raw and refined grades of crystalline sugar have been used in the production of livestock feeds. Experiments in Utah, in which sugar has been used in finish feeding of beef cattle, have indicated that sugar in the finish ration yields a higher quality and better storing beef. Considerable work has been done in Iowa on the use of sugar in pig pellets for weaning pigs at an early age. Sugar is a very important ingredient in such feeds. It does not appear to be unreasonable to expect further developments along these lines in all livestock feeds, and it would appear that there are expanding markets for sugar both in the form of molasses and in the form of dry sugar. Another potential outlet for sugar is based on the fact that sugar is a chemical compound, sucrose, with versatile properties and is available in relatively pure form in large quantities. It may be used for the production of such things as plastics and plasticizers, detergents, emulsifiers, insecticides, insecticidal formulations, and for the production of pure chemicals such as glycerol, glycols, sorbitol, and other polyhydric compounds.

The sugar industry, through research in laboratories of individual companies and that sponsored by the Sugar Research Foundation, has been developing these chemical uses for sugar. In addition, there is some reason to believe that the fermentation industries would find sugar a more desirable raw material than their present raw material, molasses, for the production of such things as citric acid. It may well be that for most chemical uses molasses has too many impurities to be used extensively and that sugar would be a more desirable raw material. Currently sugar is used to only a limited extent by the chemical industry, principally for the production of adhesives and dextran for a blood-volume extender.

A number of legal problems, some stemming from the Sugar Act, and others from Tariff Act classification, affect the development of the non-food uses for both sugar and molasses. For example, liquid molasses not used for the production of sugar is exempted from quota control under the Sugar Act, whereas dried molasses is subject to control under that Act. Likewise, under the Tariff Act, liquid molasses, not for human consumption or the extraction of sugar, is dutiable at a low tariff under paragraph 502, but dried molasses is dutiable at a much higher rate as sugar under paragraph 501. The situation is further accentuated by the Internal Revenue Code which imposes an Import Compensation Tax on sugar other than raw sugar to be further

refined or improved in quality. To sum up, molasses which would be exempt from quota control and which would pay a low tariff rate and no Import Compensating Tax when in liquid form is subject to quota control, the higher sugar tariff rate, and a tax on manufactured sugar if imported as a dried product.

Molasses when used to produce sugar or liquid sugar becomes subject to quota control. Consequently, a complication arises when molasses is used to produce chemical products if at some stage within the process the molasses is converted to a product which is identifiable as sugar or liquid sugar.

The Sugar Act provides for exemption from quota control for that sugar which is used for livestock feed or the distillation of alcohol. However, the Tariff Act and the Internal Revenue Code impose sugar tariff rates and the Import Compensating Tax on such sugar. An exception occurs when such sugar is brought into the country by a refiner. In that case, an import compensating tax is not imposed, rather a processing tax of equivalent amount is effective if the sugar is marketed for quota purposes. However, if the sugar is marketed for exempted purposes the processing tax is remitted. A similar provision for refunding the import compensating tax does not exist.

Although expanded non-food markets for sugar and molasses depend primarily upon research, development of new outlets will be affected by the legal situation surrounding their use. Consistent treatment under the Sugar Act, the Tariff Act, and the Internal Revenue Code would eliminate some of the current uncertainties which impede the development of such outlets.

SUGAR ACT OF 1948 -- ADMINISTRATIVE ACTIONS

Date announced	Administrative Action
August 23, 1954	Public hearing to be held on fair and reasonable prices for 1955 crop of Hawaii sugarcane at Hilo, Island of Hawaii, in the Circuit Court Room, Post Office Building, on September 30, 1954 at 9 a.m. The Department requests that all interested parties appear to express their views and present appropriate data in regard to fair prices.
August 25, 1954	Certification by the Department for entry of Philippine sugar after August 27 required. Since more than 80 percent of the quota has

Date announced	Administrative Action
August 25, 1954 (cont'd)	been filled this action is necessary to prevent entry of sugar in excess of the quota.
August 26, 1954	Determination of restrictive proportionate shares (farm acreage allotments) for sugarcane farms in the mainland cane sugar area (Louisiana and Florida) for 1955 crop. On the basis of current estimates a 1955 crop approximating the area's statutory quota of 500,000 tons of sugar will meet quota and carryover requirements. The determination ostablishes proportionate shares totaling approximately 294,000 acres. This compares with a total of about 315,000 acres this year. With minor differences, the determination establishes individual farm shares substantially by the same methods as provided for the 1954 crop.
August 31, 1954	Revised allotments to processors of the 1954 mainland and local sugar quotas for Puerto Rico announced. The revision is based on final 1953-54 crop production and January 1, 1954 carryover data and is established on the same basis as the initial allotments in Sugar Regulation 814.11.
September 1, 1954	Revised allotments of the 1954 sugar quota for the domestic beet sugar area. This revision is made to give effect to a stipulation and petition entered into by all of the processors subsequent to the issuance of the prior order on July 31.
September 2, 1954	Public hearing on wages and prices for the 1955 crop year for the sugar beet regions of California, southwestern Arizona, western Nevada and southern Oregon to be held at Berkeley, California, in the Board Room, California Farm Bureau Federation Building, on October 6, at 10 a.m. The Department requests all interested persons to appear at the hearing to express their views and present appropriate data in regard to wages and prices.

Date announced	Administrative Action
September 9, 1954	Determination of "fair and reasonable prices" for 1954-crop Louisiana sugarcane continues the provisions of the determination for the 1953 crop and at current market prices of raw sugar and molasses would return to producers about $6.60 per ton of standard sugarcane. Anticipated crop and market conditions indicate no need for a change in the sharing relationship which has existed between Louisiana sugarcane producers and raw sugar processors for the past several years.
September 13, 1954	Public hearings on wage rates and prices for the calendar or crop year 1955 for Puerto Rican and Virgin Island sugarcane areas to be held during October. The first meeting will be held at San Juan, Puerto Rico, in the conference room of the Agricultural Stabilization and Conservation Office, Segarra Building, on October 21 at 9:30 a.m. and the second at Christiansted, St. Croix, Virgin Islands, in the District Court Room, on October 26 at 9:30 a.m. The Department requests all interested persons to appear at the hearings to express their views and present supporting data in regard to wages and prices.
September 22, 1954	Public hearing to develop a basis for 1955 Puerto Rican sugar quota allotments will be held at 10 a.m. October 19, 1954, at the Caribbean Agricultural Stabilization and Conservation Office, Santurce, Puerto Rico. Although 1955 sugar production in Puerto Rico will be limited to what may be marketed under present mainland and local quotas, the size of the carry-over on December 31, 1954 will necessitate quota allotments to assure orderly marketing within quota limits.

STATISTICAL SERIES IN THIS ISSUE

HIGHLIGHTS

1. Deliveries of sugar for U. S. consumption by primary distributors during August, 781 thousand tons, approximately the same as the 779 thousand tons distributed during August, 1953. Total deliveries during January-August, 5,469 thousand tons, down 160 thousand tons or 3 percent from comparable period of 1953. Deliveries by beet sugar processors for the eight months were 77 thousand tons ahead of last year whereas deliveries by other distributors were 237 thousand tons behind.

2. Total stocks held by primary distributors on September 4, 1,159 thousand tons, 216 thousand more than on August 31, 1953. Stocks held by each group of distributors other than refiners were substantially higher than a year ago.

3. Charges against quotas during January-August, 5,996 thousand tons, up 108 thousand tons or 1.8 percent from comparable period of 1953. Increases in charges against quotas were: Philippine Islands, 208 thousand tons; domestic beet sugar area, 70 thousand; mainland cane sugar area, 37 thousand; Cuba, 20 thousand. Decreases were as follows: Puerto Rico, 160 thousand tons; Hawaii, 50 thousand; "full-duty" countries, 12 thousand; Virgin Islands, 5 thousand,

4. Total deliveries of sugar during second quarter of 1954 were higher in all geographic areas of the continental United States than during the same period in 1953, except in the east where they were down 348 thousand bags. Refiners' and importers' total deliveries were down 586 thousand and 410 thousand bags, respectively; deliveries by mainland cane mills and beet sugar processors were up 97 thousand and 1,772 thousand bags, respectively. Deliveries by beet sugar processors increased 26 percent over last year.

   Refiners' deliveries declined 514 thousand bags in the eastern states (265,000 in Pennsylvania) and 427 thousand bags in the east north central states, but increased

HIGHLIGHTS (cont'd)

approximately 418 thousand bags in the southern area. Beet processors' deliveries increased in all areas, with exceptional increases in California (443,000 bags) and Illinois (468,000 bags). Importers' deliveries were down 223 thousand bags in Michigan, 263 thousand bags in Georgia. Mainland cane mills' deliveries decreased 79 thousand bags in Illinois, but increased 53 thousand bags in Ohio, and 110 thousand bags in total for the south. For second quarter 1953 data by states see Sugar Reports No. 24, April 1954.

5. Deliveries of sugar to hotels, restaurants, and institutions, and to wholesale grocers, jobbers, and sugar dealers in first quarter 1954 were about 12 percent less than a year earlier, but deliveries to ice cream and dairy products manufacturers were up 8.3 percent, and to retail grocers, chain stores, and super markets, 3.9 percent. Deliveries to other groups showed smaller differences. Corn sirup deliveries to the confectionery and related products industry, by far the largest users of this product, declined 2.5 percent. Dextrose deliveries for bakery, cereals, and allied products, ice cream and dairy products, beverages, and canned, bottled, and frozen foods, were down 8.9 percent but for confectionery and related products, multiple and "other" uses, and non-food products deliveries increased 10.6 percent over the first quarter of 1953.

6. Percentage of sugar produced per ton of cane or beets processed and wage rates of field workers increased in 1953 over 1952. These and other data relating to production, crop value, and field worker requirements for domestic sugar producing areas 1948-53 are shown in table 22.

Table 3.- Distribution of sugar by primary distributors in the continental United States, Puerto Rico, and Hawaii during January - July 1954 and 1953

	1954	1953
	(Short tons, raw value)	
Continental United States		
Refiners' raw	673	1,365
Refiners' refined	3,309,197	3,520,719
Beet processors	971,567	887,082
Importers' direct-consumption	363,079	402,812
Mainland cane mills' direct-consumption	63,433	60,126
Total	4,707,949	4,872,104
Deliveries for export, livestock feed, etc.	18,361	21,110
For continental consumption 1/	4,689,588	4,850,994
Puerto Rico	51,792	45,187
Hawaii	24,338	29,528

1/ Includes deliveries for United States military forces at home and abroad.

Table 4.- Stocks of sugar held by primary distributors in the continental United States, July 31, 1954 and 1953

	1954	1953
	(Short tons, raw value)	
Refiners' raw	288,500	276,392
Refiners' refined	297,117	323,485
Beet processors	478,235	429,243
Importers' direct consumption	112,891	52,649
Mainland sugarcane mills	62,130	8,231
Total	1,238,873	1,090,000

Table 5.- Raw sugar: Refiners' stocks, receipts and meltings, January - July 1954

Source of supply	Stocks Jan. 1, 1954	Receipts	Meltings	Deliveries for direct consumption	Stocks July 31, 1954
	(short tons, raw value)				
Cuba	17,905	1,648,745	1,553,524	130	112,996
Hawaii	59,041	550,619	519,341	0	90,319
Mainland cane	67,819	122,273	174,766	168	15,158
Philippines	29,250	700,440	685,780	92	43,818
Puerto Rico	13,414	452,703	445,138	283	20,696
Virgin Islands	0	2,259	2,259	0	0
Other countries	512	13,211	8,210	0	5,513
Not identifiable	0	51	51	0	0
Total	187,941	3,490,301	3,389,069	673	288,500

Source: Compiled from reports submitted on Form SU-15A by cane sugar refiners.

Table 6.- Refined sugar: Refiners' and processors' stocks, production and deliveries, January-July 1954

	Cane Sugar	Beet Sugar
	(short tons, raw value)	
Stocks, January 1, 1954	217,064	1,122,852 1/
Production	3,389,601	327,773
Received from other primary distributors	3,846	3,084
Deliveries for consumption	3,309,197	971,567
Deliveries to other primary distributors	4,197	3,907
Stocks, July 31, 1954	297,117	478,235

Source: Compiled from reports submitted on Form SU-16A and SU-11C by cane sugar refiners and beet sugar processors.
1/Revised.

Table 7.- Direct-consumption sugar: Importers' stocks, receipts and deliveries - January-July 1954

Source of supply	Stocks Jan. 1, 1954	Receipts	Deliveries	Stocks July 31, 1954
		(short tons, raw value)		
Cuba	2,780	333,821	239,517	97,084
Hawaii	2,194	16,019	12,652	5,561
Philippines	322	2,990	2,162	1,150
Puerto Rico	0	73,911	72,147	1,764
Other countries	6,076	37,857	36,601	7,332
Total	11,372	464,598	363,079	112,891

Source: Compiled from reports on Form SU-15B submitted by importers of direct-consumption sugar.

Table 8.- Mainland sugarcane mills' stocks, production and deliveries of sugar, January - July, 1954

	short tons, raw value	
Stocks January 1, 1954		143,653
Production		107,721
Deliveries		
For further processing	125,811	
For direct-consumption	63,433	
Total		189,244
Stocks July 31, 1954		62,130

Source: Compiled from reports submitted by mainland sugarcane processors and processor-refiners.

Table 9.- Distribution of sugar by primary distributors in the continental United States, August and January-August 1954 and 1953

	1954 1/		1953	
	August	Jan.-Aug.	August	Jan.-Aug.
	short tons, raw value			
Refiners	558,642	3,868,512	545,957	4,068,041
Beet processors	155,017	1,126,584	162,532	1,049,614
Importers	65,133	428,212	66,893	469,705
Mainland sugarcane mills	2,399	65,832	3,478	63,604
Total	781,191	5,489,140	778,860	5,650,964
Deliveries for export, livestock feed, etc.	1,284	19,645	1,245	22,355
For continental consumption 2/	779,907	5,469,495	777,615	5,628,609

1/ Preliminary.
2/ Includes deliveries for U. S. military forces at home and abroad.

Table 10.- Stocks of sugar held by primary distributors in the continental United States, September 4, 1954, and August 31, 1953

	September 4, 1954 1/	August 31, 1953
	(short tons, raw value)	
Refiners' raw	325,217	273,103
Refiners' refined	267,529	312,100
Beet processors	414,736	303,678
Importers	89,530	51,654
Mainland sugarcane mills	62,130 2/	2,596
Total	1,159,142	943,131

1/ Preliminary.
2/ Not available; estimated same as July 31, 1954.

Table 11.- Status of 1954 sugar quotas as of August 31, 1954

Area	Quota	Credit for drawback of duty	Charge to quota and offset to drawback of duty	Unfilled balance: Total	Unfilled balance: Within direct consumption limits for off-shore areas
		short tons, raw value			
Domestic beet	1,800,000	-	1,128,308	671,692	-
Mainland cane	500,000	-	234,208 1/	265,792	-
Hawaii	1,052,000	-	668,115	383,885	9,412
Puerto Rico	1,080,000	-	689,072	390,928	27,003
Virgin Islands	12,000	-	4,297	7,703	0
Republic of the Philippines	974,000	-	866,958	107,042	48,875
Cuba	2,670,720	3,135	2,325,679	348,176	826
Other foreign countries (see below)	111,280	1,299	78,868	33,711	0
Total	8,200,000	4,434	5,995,505	2,208,929	-
Foreign countries other than Cuba and Republic of the Philippines					
Dominican Republic	27,634	575	25,023	3,186	)
El Salvador	4,140	-	0	4,140	)
Haiti	2,674	47	2,682	39	)
Mexico	11,458	114	11,562	10	) 0
Nicaragua	7,832	-	7,824	8	)
Peru	51,978	563*	26,216	26,325	)
Unspecified countries (those without individual prorations)	5,564	-	5,561 2/	3 3/	)
Total	111,280	1,299	78,868	33,711	

Liquid Sugar 4/

	Wine gallons of 72 percent total sugar content			
Cuba	7,970,558	-	7,948,388	22,170
Dominican Republic	830,894	-	830,894	0
British West Indies	300,000	-	0	300,000

1/ August estimated same as August 1953.

2/ Belgium, 337; China (Formosa), 1,037; Canada, 995; Costa Rica, 1,036; Hong Kong, 6; Netherlands, 1,037; Panama, 1,113; also entered under Sec. 212, 10 tons each: Denmark, Germany, United Kingdom.

3/ Applications being held awaiting availability of quota comprise Belgium, 243; Canada, 214; China (Formosa), 1,186; Costa Rica, 1,358, Denmark, 1,164; Hong Kong, 9; Netherland, 974; Panama, 1,057; total, 6,205.

4/ 900 gallons entered by United Kingdom under Section 212.

* Revised.

Table 12.- Comparison of charges to quotas and offsets to drawback of duty
January - August 1953 and 1954

(Short tons, raw value and percentage)

Area	1953	1954	Increases 1953 to 1954		Decreases 1953 to 1954	
	Tons	Tons	Tons	Percent	Tons	Percent
Domestic beet	1,058,384	1,128,308	69,924	6.6	-	-
Mainland cane	196,717 1/	234,208	37,491	19.1	-	-
Hawaii	718,435	668,115	-	-	50,320	7.0
Puerto Rico	849,243	689,072	-	-	160,171	18.9
Virgin Islands	9,077	4,297	-	-	4,780	52.7
Republic of the Philippines	658,722	866,958	208,236	31.6	-	-
Cuba	2,305,920	2,325,679	19,759	.9	-	-
Other foreign countries (see below)	90,799	78,868	-	-	11,931	13.1
Total	5,887,297	5,995,505	108,208 2/	1.8	-	-
Foreign countries other than Cuba and Republic of the Philippines						
Dominican Republic	27,020	25,023	-	-	1,997	7.4
El Salvador	-	0	-	-	-	-
Haiti	2,660	2,682	22	0.8	-	-
Mexico	11,088	11,562	474	4.3	-	-
Nicaragua	6,948	7,824	876	12.6	-	-
Peru	37,919	26,216	-	-	11,703	30.9
Unspecified countries (those without individual prorations)	5,164	5,561	397	7.7	-	-
Total	90,799	78,868	-	-	11,931 3/	13.1

Liquid Sugar

	Wine gallons of 72 percent total sugar content					
Cuba	7,760,899	7,948,388	187,489	2.4	-	-
Dominican Republic	830,894	830,894	-	-	-	-
British West Indies	0	0	-	-	-	-

1/ Revised.

2/ Net increase.

3/ Net decrease.

Table 13.- Status of 1954 sugar quotas as of September 16, 1954

Area	Quota	Credit for drawback of duty	Charge to quota and offset to drawback of duty	Unfilled balance: Total	Unfilled balance: With direct consumption limits for offshore areas
	short tons, raw value				
Domestic beet	1,800,000	-	1,212,966 1/	587,034	-
Mainland cane	500,000	-	235,133 1/	264,867	-
Hawaii	1,052,000	-	714,866	337,134	6,161
Puerto Rico	1,080,000	-	742,172	337,828	15,264
Virgin Islands	12,000	-	4,297	7,703	0
Republic of the Philippines	974,000	-	952,099	21,901	21,901
Cuba	2,670,720	3,135	2,418,681	255,174	0
Other foreign countries (see below)	111,280	1,299	93,263	19,316	0
Total	8,200,000	4,434	6,373,477	1,830,957	-
Foreign countries other than Cuba and Republic of the Philippines					
Dominican Republic	27,634	575	28,209	0	)
El Salvador	4,140	-	0	4,140	)
Haiti	2,674	47	2,682	39	)
Mexico	11,458	114	11,562	10	) 0
Nicaragua	7,832	-	7,824	8	)
Peru	51,978	563	37,425	15,116	)
Unspecified countries (those without individual prorations)	5,564	-	5,561 2/	3 3/	)
Total	111,280	1,299	93,263	19,316	

Liquid Sugar 4/

	Wine gallons of 72 percent total sugar content			
Cuba	7,970,558	-	7,948,388	22,170
Dominican Republic	830,894	-	830,894	0
British West Indies	300,00	-	0	300,000

1/ Estimated.

2/ See footnote 2/ of Table 11.

3/ See footnote 3/ of Table 11.

4/ See footnote 4/ of Table 11.

Table 14.- Deliveries of sugar by primary distributors by states
Second Quarter 1954

State	Cane sugar refiners	Beet sugar processors	Importers of direct-consumption sugar	Mainland cane sugar mills	Total
			100 pound bags, refined equivalent		
Ala.	578,778	-	450	21,411	600,639
Ariz.	66,778	44,987	-	-	111,765
Ark.	310,052	43,775	-	5,036	358,863
Calif.	1,560,419	1,613,555	3,518	-	3,177,492
Colo.	23,944	288,589	144	-	312,677
Conn.	243,136	-	18,945	-	262,081
Del.	38,022	-	-	-	38,022
D. C.	150,592	-	9,850	-	160,442
Fla.	261,941	-	278,115	11,241	551,297
Ga.	994,330	-	307,698	-	1,302,028
Idaho	13,043	60,217	-	-	73,260
Ill.	1,743,046	1,636,735	1,440	88,803	3,470,024
Ind.	868,248	201,654	59,405	21,002	1,150,309
Iowa	210,325	373,772	3,600	1,311	589,008
Kans.	94,364	259,790	-	-	354,154
Ky.	493,664	-	16,928	28,194	538,786
La.	908,140	-	-	66,961	975,101
Maine	134,088	-	825	-	134,913
Md.	703,673	-	166,866	-	870,539
Mass.	1,070,469	-	43,305	-	1,113,774
Mich.	305,161	559,287	78,770	5,610	948,828
Minn.	133,687	679,556	-	1,000	814,243
Miss.	391,047	-	-	15,316	406,363
Mo.	717,331	342,768	2,400	1	1,062,500
Mont.	4,791	90,718	-	-	95,509
Nebr.	66,568	420,791	-	301	487,660
Nev.	12,618	6,941	-	-	19,559
N. H.	84,733	-	600	-	85,333
N. J.	1,444,801	-	55,165	893	1,500,859
N. Mexico	17,605	45,100	-	-	62,705
N. Y.	3,672,302	37,000	667,248	-	4,376,550
N. C.	681,121	-	244,149	-	925,270
N. Dak.	7,553	92,275	-	-	99,828
Ohio	1,283,535	103,974	113,063	57,894	1,558,466
Okla.	282,300	106,109	-	-	388,409
Oregon	94,593	217,098	73,217	-	384,908
Pa.	2,050,478	1,003	653,328	51	2,704,860
R. I.	131,505	-	1,100	-	132,605
S. C.	335,946	-	31,112	-	367,058
S. Dak.	8,287	121,005	-	-	129,292
Tenn.	755,126	-	12,832	46,182	814,140
Texas	1,351,162	300,219	89,509	1,704	1,742,594
Utah	16,996	123,974	-	-	140,970
Vt.	43,189	-	19,308	-	62,497
Va.	413,344	-	223,346	-	636,690
Wash.	134,577	297,566	73,751	-	505,894
W. Va.	227,477	-	26,918	-	254,395
Wis.	424,729	541,212	-	6,552	972,493
Wyo.	3,023	37,292	-	-	40,315
Total	25,562,637	8,646,962	3,276,905	379,463	37,865,967

Table 15.- Deliveries of sugar by primary distributors by states
May 1954

State	Cane sugar refiners	Beet sugar processors	Importers of direct-consumption sugar	Mainland cane sugar mills	Total
			100 pound bags, refined equivalent		
Ala.	190,480	-	-	5,934	196,414
Ariz.	23,421	14,951	-	-	38,372
Ark.	93,498	25,800	-	2,147	121,445
Calif.	485,135	504,721	1,567	-	991,423
Colo.	8,076	101,130	96	-	109,302
Conn.	79,542	-	5,675	-	85,217
Del.	11,109	-	-	-	11,109
D. C.	46,351	-	3,200	-	49,551
Fla.	88,338	-	87,426	6,070	181,834
Ga.	304,176	-	200,800	-	504,976
Idaho	4,034	17,961	-	-	21,995
Ill.	635,095	603,354	-	19,554	1,258,003
Ind.	250,435	76,436	38,030	6,599	371,500
Iowa	51,998	150,681	-	707	203,386
Kans.	27,335	86,685	-	-	114,020
Ky.	155,907	-	4,020	7,958	167,885
La.	294,425	-	-	20,627	315,052
Maine	43,863	-	350	-	44,213
Md.	230,127	-	50,882	-	281,009
Mass.	354,029	-	5,644	-	359,673
Mich.	101,775	154,210	30,225	3,200	289,410
Minn.	37,789	212,803	-	1,000	251,592
Miss.	123,814	-	-	4,753	128,567
Mo.	207,521	130,914	-	1	338,436
Mont.	1,777	29,186	-	-	30,963
Nebr.	13,036	123,458	-	-	136,494
Nev.	4,238	492	-	-	4,730
N. H.	27,276	-	-	-	27,276
N. J.	474,659	-	13,709	893	489,261
N. Mex.	5,279	18,854	-	-	24,133
N. Y.	1,131,412	13,000	184,354	-	1,328,766
N. C.	218,291	-	60,213	-	278,504
N. Dak.	2,817	27,653	-	-	30,470
Ohio	393,480	28,666	40,130	15,081	477,357
Okla.	82,089	40,433	-	-	122,522
Oregon	28,471	59,071	16,298	-	103,840
Pa.	678,466	3	186,600	1	865,070
R. I.	42,550	-	300	-	42,850
S. C.	108,675	-	6,514	-	115,189
S. Dak.	2,513	64,059	-	-	66,572
Tenn.	267,479	-	5,230	17,462	290,171
Texas	410,264	90,305	23,961	378	524,908
Utah	4,293	32,788	-	-	37,081
Vt.	13,176	-	3,000	-	16,176
Va.	126,998	-	70,946	-	197,944
Wash.	46,410	99,194	24,030	-	169,634
W. Va.	75,027	-	7,075	-	82,102
Wis.	138,256	186,920	-	935	326,111
Wyo.	1,635	11,563	-	-	13,198
Total	8,146,840	2,905,291	1,070,275	113,300	12,235,706

Table 16.- Deliveries of sugar by primary distributors by states
June 1954

State	Cane sugar refiners	Beet sugar processors	Importers of direct-consumption sugar	Mainland cane sugar mills	Total
			100 pound bags, refined equivalent		
Ala.	196,094	-	450	7,808	204,352
Ariz.	23,646	15,609	-	-	39,255
Ark.	119,371	9,975	-	1,197	130,543
Calif.	616,068	606,227	1,179	-	1,223,474
Colo.	5,815	93,788	-	-	99,603
Conn.	105,672	-	6,820	-	112,492
Del.	15,621	-	-	-	15,621
D. C.	64,116	-	3,250	-	67,366
Fla.	87,375	-	120,235	1,581	209,191
Ga.	355,483	-	90,441	-	445,924
Idaho	5,326	24,494	-	-	29,820
Ill.	632,530	527,346	-	40,530	1,200,406
Ind.	380,933	59,706	7,140	7,925	455,704
Iowa	88,114	116,772	-	-	204,886
Kans.	36,895	97,030	-	-	133,925
Ky.	188,853	-	4,057	13,068	205,978
La.	335,292	-	-	23,185	358,477
Maine	57,406	-	475	-	57,881
Md.	294,007	-	95,094	-	389,101
Mass.	412,770	-	29,703	-	442,473
Mich.	148,651	279,226	19,993	1,600	449,470
Minn.	54,382	355,931	-	-	410,313
Miss.	154,493	-	-	4,646	159,139
Mo.	300,554	118,649	-	-	419,203
Mont.	1,611	37,203	-	-	38,814
Nebr.	33,600	174,050	-	-	207,650
Nev.	4,933	4,644	-	-	9,577
N. H.	34,051	-	600	-	34,651
N. J.	554,977	-	24,614	-	579,591
N. Mex.	9,117	14,168	-	-	23,285
N. Y.	1,529,089	10,000	323,261	-	1,862,350
N. C.	266,729	-	102,860	-	369,589
N. Dak.	3,108	45,072	-	-	48,180
Ohio	558,872	42,949	47,492	21,489	670,802
Okla.	116,037	32,539	-	-	148,576
Oregon	45,162	113,444	29,175	-	187,781
Pa.	873,553	-	225,001	25	1,098,579
R. I.	53,429	-	600	-	54,029
S. C.	145,358	-	14,913	-	160,271
S. Dak.	3,734	30,505	-	-	34,239
Tenn.	256,902	-	4,585	12,281	273,768
Texas	543,344	92,639	45,549	1,308	682,840
Utah	6,160	48,686	-	-	54,846
Vt.	19,569	-	10,538	-	30,107
Va.	186,429	-	73,141	-	259,570
Wash.	50,958	107,699	23,776	-	182,433
W. Va.	106,607	-	13,241	-	119,848
Wis.	168,569	261,224	-	3,531	433,324
Wyo.	256	12,760	-	-	13,016
Total	10,251,621	3,332,335	1,318,183	140,174	15,042,313

Table 17.- Sugar deliveries, by type of product or business of buyer and by type of sugar, first quarter 1954 1/

United States

Product or Business of Buyer	Beet	Cane	Imported D. C.	Liquid 2/	Total Sugar
			100 pound bag refined		
Bakery, cereal and allied products	1,330,175	2,125,310	125,724	234,308	3,815,517
Confectionery and related products	627,146	1,671,510	390,970	608,214	3,297,840
Ice cream and dairy products	269,723	669,950	38,890	381,939	1,360,502
Beverages	346,505	1,745,604	246,850	1,174,985	3,513,944
Canned, bottled, frozen foods; jams, jellies and preserves	662,393	783,160	226,819	334,487	2,006,859
Multiple and all other food uses	208,656	730,864	11,609	378,967	1,330,096
Non-food products	2,826	135,476	73,079	30,789	242,170
Hotels, restaurants, institutions	12,984	116,350	3,940	2,551	135,825
Wholesale grocers, jobbers, sugar dealers	2,090,638	9,967,787	469,313	18,015	12,545,753
Retail grocers, chain stores, super markets	843,471	4,374,923	39,918	9,667	5,267,979
All other deliveries including deliveries to Government agencies	225,522	353,355	456	40	579,373
TOTAL DELIVERIES	6,620,039	22,674,289	1,627,568	3,173,962	34,095,858
Deliveries in consumer size packages (less than 100 lbs.)	1,499,144	9,812,425	82,410	-	11,393,979

1/ Represents approximate 98 percent of deliveries by primary distributors in continental United States. 2/ Refined equivalent.

NOTE: Some differences exist between these data and deliveries by states. These differences are presently being taken up with the primary distributors to ascertain if they are caused by differences in methods of reporting.

Source: Reports of primary distributors of sugar to Sugar Division, CSS.

Table 18.- Sugar deliveries, by type of product or business of buyer, first quarter 1954 and percentage change from first quarter 1953

Product or Business of Buyer	United States	New England	Middle Atlantic	North Central	South	West
	100 pound bag equivalent					
Bakery, cereal and allied products	3,815,517	163,988	1,209,053	1,259,479	696,945	486,052
Confectionery and related products	3,297,840	386,710	1,519,410	924,627	285,952	181,141
Ice cream and dairy products	1,360,502	62,397	357,039	386,031	395,491	159,544
Beverages	3,513,944	116,796	871,100	721,474	1,494,888	309,686
Canned, bottled, frozen foods; jams jellies, preserves, etc.	2,006,859	117,242	517,503	464,072	409,317	498,725
Multiple and all other food uses	1,330,096	41,358	633,653	406,025	88,860	160,200
Non-food products	242,170	4,578	88,056	36,567	112,591	378
Hotels, restaurants, institutions	135,825	22,039	70,857	17,375	15,640	9,914
Wholesale grocers, jobbers, sugar dealers	12,545,753	713,098	1,872,538	4,153,462	4,528,494	1,278,161
Retail grocers, chain stores, super markets	5,267,979	425,163	1,253,189	1,390,497	1,438,403	760,727
All other deliveries, including deliveries to Government agencies	579,373	16,988	88,466	70,951	163,277	239,691
TOTAL DELIVERIES	34,095,858	2,070,357	8,480,864	9,830,560	9,629,858	4,084,219
	Percentage change from first quarter 1953					
Bakery, cereal and allied products	- 2.4	≠ 7.3	≠ 6.4	≠ 0.1	- 0.8	-26.5
Confectionery and related products	- 3.7	≠ 3.5	-11.0	≠14.1	- 2.5	-24.3
Ice cream and dairy products	≠ 8.3	≠31.6	- 2.7	- 0.1	≠56.5	-21.4
Beverages	- 1.7	-10.1	≠ 0.5	- 0.4	- 2.4	- 3.8
Canned, bottled, frozen foods; jams, jellies, preserves, etc.	- 0.4	≠23.0	≠10.0	≠21.6	- 4.1	-22.3
Multiple and all other food uses	- 6.0	-12.2	-14.6	≠17.8	- 7.5	-13.2
Non-food products	- 3.3	-10.4	≠11.3	- 2.5	-11.3	-80.1
Hotels, restaurants, institutions	-12.6	0.0	-17.4	- 2.4	-17.5	- 8.3
Wholesale grocers, jobbers, sugar dealers	-11.3	≠ 1.4	- 8.4	- 7.8	- 4.6	-40.5
Retail grocers, chain stores, super markets	≠ 3.9	≠ 6.5	- 1.8	≠ 1.8	≠ 7.2	≠10.8
All other deliveries, including deliveries to Government agencies	≠ 4.2	≠ 6.4	-15.9	≠59.4	≠11.1	- 1.6
TOTAL	- 4.7	≠ 3.9	- 4.5	- 0.5	- 0.6	-23.6

Table 19.- Deliveries of cane and beet sugar by primary distributors in consumer size packages(less than 100 pounds), first quarter, 1954

Area	Cane Sugar	Beet Sugar	Total
		(hundredweight refined)	
United States	9,894,835	1,499,144	11,393,979
New England	424,950		424,950
Middle Atlantic	2,306,265		2,306,265
North Central and West, combined*	3,287,465	1,455,906	4,743,371
South	3,876,155	43,238	3,919,393

*Combined to avoid disclosure of individual company data. Total distribution in consumer size packages in these areas: North Central, 3,296,442; West, 1,446,929.

Source: Reports of primary distributors of sugar to the Sugar Division, CSS.

Table 20.- Corn sirup (unmixed) sales by type of product or business of buyer, first quarter 1954.

UNITED STATES

Product or Business of Buyer		First quarter 1954		Change from 1st quarter 1953
		(hundredweight)		(percent)
Bakery and allied products, cereal and cereal products		290,928		≠1.1
Confectionery and related products		1,696,992		-2.5
Ice cream and dairy products		106,077		≠20.8
Brewery and brewery supply houses	66,157		≠0.7	
Soft drinks	5,032		-4.6	
Total beverages		71,189		≠0.2
Canned,bottled,frozen foods; jams,jellies,preserves,etc.		239,720		-6.6
Blended sirups	799,483		-4.4	
Miscellaneous food products	149,956		≠10.4	
Total multiple and all other products		949,439		-2.3
Non-food products		116,269		-15.7
Wholesale grocers,jobbers, sugar dealers		21,623		-33.1
TOTAL DOMESTIC SALES		3,492,237		-2.6
TOTAL DOMESTIC SALES, DRY BASIS*		2,804,266		

*Based on 43° sirup with average solids content of 80.3 percent.

Source: Corn refiners' reports to Price Waterhouse.

Table 21.- Dextrose sales, by type of product or business of buyer, first quarter 1954 and percentage change from first quarter 1953

Product or Business of Buyer	United States	New England	Middle Atlantic	North Central	South	West
	100 pound bag equivalent					
Bakery, cereal and allied products	975,748	35,536	184,774	419,492	234,383	101,563
Confectionery and related products	113,062	2,916	45,502	56,589	6,529	1,526
Ice cream and dairy products	49,042	1,754	10,164	15,674	15,315	6,135
Beverages	110,926	6,875	26,129	44,605	11,706	21,611
Canned, bottled, frozen foods; jams, jellies, preserves, etc.	91,847	952	22,402	7,970	54,526	5,997
Multiple and all other food uses	129,688	4,720	37,592	59,698	18,871	8,807
Non-food products	161,426	16,914	46,422	41,047	55,398	1,645
Wholesale grocers, jobbers, sugar dealers, retail grocers, chain stores, super markets	43,642	1,418	3,412	20,821	8,117	9,874
All other deliveries, including deliveries to Government agencies	32,792	1,207	4,835	21,832	2,761	2,157
TOTAL SALES	1,708,173	72,292	381,232	687,728	407,606	159,315
	Percentage change from first quarter 1953					
Bakery, cereal and allied products	- 7.5	- 22.0	- 8.7	+ 1.7	- 11.3	- 22.0
Confectionery and related products	+ 4.2	+ 63.0	- 8.2	+ 34.5	- 44.6	- 52.7
Ice cream and dairy products	-19.5	+ 5.2	- 22.0	- 12.8	- 20.6	- 31.4
Beverages	-15.7	- 36.8	+ 8.5	- 21.1	- 19.2	- 15.7
Canned, bottled, frozen foods; jams, jellies, preserves, etc.	- 8.6	- 2.8	- 0.8	- 54.2	+ 7.1	- 29.7
Multiple and all other food uses	+14.8	- 10.1	+ 34.9	+ 14.6	+ 3.1	- 6.9
Non-food products	+12.0	+ 45.2	+ 27.3	+ 14.6	- 5.8	+ 17.8
Wholesale grocers, jobbers, sugar dealers, retail grocers, chain stores, super markets	-26.5	- 40.4	- 19.7	- 21.8	- 29.5	- 32.3
All other deliveries, including deliveries to Government agencies	-24.8	- 1.1	- 1.8	- 31.8	- 24.7	+ 22.3
TOTAL	- 5.9	- 11.2	- 1.0	- 0.8	- 10.0	- 21.8

Table 22.- Production and estimated crop value and field worker requirements for domestic sugar producing areas, 1948-1953 crops

Crop year	Louisiana	Florida	Hawaii	Puerto Rico 1/	Beet Area 2/
			Number of farms		
1948	5,957	25	30	13,615	31,323
1949	5,559	22	106	14,772	31,581
1950	5,028	23	149	15,661	37,328
1951	4,833	24	786	16,525	27,409
1952	4,463	25	738	18,312	24,323
1953	4,010	25	921	19,833	24,869
			Acreage harvested		
1948	273,941	35,233	100,042	336,285	670,225
1949	278,860	36,581	108,794	353,385	703,159
1950	272,842	37,357	109,405	367,093	923,703
1951	257,975	38,933	109,494	366,404	695,535
1952	274,385	42,842	108,089	391,763	660,757
1953	280,242	44,531	108,337	384,638	766,965
			Production of cane or beets		
			(net weight of cane or beets in short tons)		
1948	5,256,644	1,010,327	7,542,613	9,541,232	9,073,034
1949	4,983,982	1,125,722	8,045,941	10,998,035	10,468,444
1950	5,311,857	1,169,327	8,174,821	10,614,633	13,584,890
1951	4,462,854	1,259,526	8,477,201	10,501,394	10,496,942
1952	5,666,917	1,495,338	8,693,920	12,536,940	10,180,909
1953	5,759,310	1,453,056	9,003,967	10,170,796	12,505,181
			Yield of cane or beets per harvested acre		
			(short tons)		
1948	19.19	28.68	75.39	28.37	13.54
1949	17.87	30.77	73.96	31.12	14.89
1950	19.47	31.30	74.72	28.92	14.71
1951	17.30	32.35	77.42	28.66	15.09
1952	20.65	34.90	80.43	32.00	15.41
1953	20.55	32.63	83.11	26.44	16.30
			Production of Sugar		
			(short tons, raw value)		
1948	397,293	79,828	835,107	1,116,232	1,312,338
1949	415,811	104,928	955,890	1,287,667	1,613,952
1950	456,246	108,267	960,961	1,298,645	2,016,827
1951	296,566	122,115	995,759	1,238,323	1,541,025
1952	450,847	154,402	1,020,450	1,372,293	1,520,452
1953	481,094	150,396	1,099,316	1,181,562	1,872,561

Table 22.-(Cont.)Production and estimated crop value and field worker requirements for domestic sugar producing areas, 1948-1953 crops

Crop year	Louisiana	Florida	Hawaii	Puerto Rico 1/	Beet Area 2/
	Yield of sugar per harvested acre (short tons, raw value)				
1948	1.45	2.27	8.35	3.32	1.96
1949	1.49	2.87	8.79	3.64	2.30
1950	1.67	2.90	8.78	3.54	2.18
1951	1.15	3.14	9.09	3.38	2.22
1952	1.64	3.60	9.44	3.50	2.30
1953	1.72	3.38	10.15	3.07	2.44
	Percentage of sugar produced from cane or beets processed				
1948	7.56	7.90	11.07	11.70	14.46
1949	8.34	9.32	11.99	11.71	15.42
1950	8.59	9.26	11.76	12.23	14.85
1951	6.65	9.70	11.75	11.79	14.68
1952	7.96	10.32	11.74	10.95	14.93
1953	8.35	10.35	12.21	11.62	14.97
	Total crop value 3/ (thousands of dollars)				
1948	$54,087	$10,378	$104,788	$144,957	$172,198
1949	56,340	13,513	121,892	170,658	216,512
1950	71,311	16,320	134,457	186,026	290,950
1951	51,387	18,398	141,752	184,515	226,192
1952	66,904	21,477	141,034	196,877	218,437
1953	71,803	21,063	152,946	171,593	271,135
	Value of raw sugar (thousands of dollars)				
1948	$44,179	$ 8,877	$ 92,864	$124,125	$145,932
1949	48,317	12,193	111,074	149,627	187,541
1950	54,111	12,840	113,970	154,019	239,196
1951	35,944	14,800	120,686	150,085	186,772
1952	56,446	19,331	127,760	171,811	190,361
1953	60,522	18,920	138,294	148,640	235,568
	Value of molasses 3/ (thousands of dollars)				
1948	$ 3,513	$ 693	$ 4,295	$ 5,340	$ 3,059
1949	1,868	388	2,380	3,363	2,389
1950	10,344	2,509	12,016	14,475	18,010
1951	10,064	2,509	11,923	17,281	13,520
1952	3,793	834	3,876	6,138	3,340
1953	4,004	813	4,496	5,992	5,633

Table 22.-(Cont.)Production and estimated crop value and field worker requirements for domestic sugar producing areas, 1948-1953 crops

Crop year	Louisiana	Florida	Hawaii	Puerto Rico 1/	Beet Area 2/
	Total government payments (thousands of dollars)				
1948	$6,395	$ 808	$ 7,629	$15,492	$23,207
1949	6,155	932	8,438	17,668	26,582
1950	6,856	971	8,471	17,532	33,744
1951	5,379	1,089	9,143	17,149	25,900
1952	6,665	1,312	9,398	18,928	24,736
1953	7,277	1,330	10,156	16,961	29,934
	Number of field workers 4/				
1948	50,000	5,000	12,100	115,000	80,000
1949	50,000	4,000	13,750	148,000	111,000
1950	50,000	4,000	12,900	150,000	125,000
1951	45,000	4,000	12,300	148,000	95,000
1952	45,000	3,500	11,000	150,000	95,000
1953	45,000	3,000	10,600	118,000	90,000
	Man days per acre 5/				
1948	18.27	15.12	31.90	58.43	10.49
1949	15.82	15.47	30.06	51.21	11.84
1950	16.10	15.11	28.97	48.57	11.05
1951	15.67	14.85	38.27	47.73	9.81
1952	16.12	15.37	28.51	49.49	9.80
1953	16.08	14.60	29.74	44.64	10.30
	Man days per ton of cane or beets 5/				
1948	.95	.53	.42	2.06	.77
1949	.89	.50	.41	1.65	.80
1950	.83	.48	.39	1.68	.75
1951	.91	.46	.37	1.67	.65
1952	.78	.44	.35	1.55	.64
1953	.78	.45	.36	1.69	.63
	Man days per ton of sugar (raw value) 5/				
1948	12.60	6.66	3.82	17.60	5.35
1949	10.62	5.39	3.42	14.07	5.15
1950	9.64	5.21	3.30	13.72	5.07
1951	13.63	4.73	3.11	14.12	4.42
1952	9.83	4.27	3.02	14.14	4.26
1953	9.35	4.32	2.93	14.54	4.22

Table 22.-(Cont.)Production and estimated crop value and field worker requirements for domestic sugar producing areas, 1948-1953 crops

Crop year	Louisiana	Florida	Hawaii	Puerto Rico 1/	Beet Area 2/
	Weighted average minimum wage per day of field workers 6/ 7/				
1948	$3.31	$4.12	$ 6.92	$ 2.44	$5.62
1949	3.31	4.12	6.94	2.55	5.62
1950	3.47	4.12	7.29	2.57	5.62
1951	3.54	4.40	7.79	2.71	5.62
1952	3.91	4.87	8.47	2.90	6.07
1953	4.05	5.32	9.05	3.16	6.10
	Weighted average prevailing wage per day of field workers 7/ 8/				
1948	3.73	$6.02	$ 7.95	$ 2.77	$6.90
1949	3.85	6.02	8.80	2.76	6.72
1950	4.00	6.00	9.16	2.79	6.81
1951	4.09	6.43	9.13	2.91	7.38
1952	4.37	6.98	10.07	2.99	7.64
1953	4.70	7.55	10.42	3.09	7.71

NOTE: These data were taken from the best available sources but their accuracy varies from area to area. The data are believed to be sufficiently reliable to present a generalized comparison between the areas.

1/ Data are for the 1947-48 crop through the 1952-53 crop except for minimum wage per day for field workers which is for the calendar years.

2/ 1953 data relating to harvested acreage, production and value for the beet area are preliminary.

3/ For comparability between areas raw sugar valued at the New York duty-paid price for the calendar year; and molasses valued at the season's average price for Louisiana molasses:

Year	Raw sugar (¢ per lb.)	Molasses (¢ per gal.)	Year	Raw sugar (¢ per lb.)	Molasses (¢ per gal.)
1948	5.56	9.70	1951	6.06	28.68
1949	5.81	5.64	1952	6.26	8.80
1950	5.93	29.23	1953	6.29	10.01

4/ Estimated peak number of workers employed during crop including working farm operators.

5/ Exclusive of administration and employee services.

6/ Based on minimum time rates in wage determinations.

7/ Daily wages computed on basis of eight hour day in Hawaii and Puerto Rico and nine hour day in other areas.

8/ Based on average daily cash earnings of workers employed on time or piece work rate basis. For the beet area the rate shown includes earning of hand workers for whom specific rates are established in wage determinations and the earnings of workers in operations for which specific rates are not established in wage determinations.

UNITED STATES DEPARTMENT OF AGRICULTURE
Commodity Stabilization Service
Sugar Division
Washington 25, D. C.

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